

# Jiating Yu, Ph.D.

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🌐 <http://faculty.nuist.edu.cn/yujiating/en/index.htm>



## Employment History

2023 – Now      📖 **Nanjing University of Information Science and Technology (NUIST)**  
Assistant Professor, School of Mathematics and Statistics

## Education

2018 – 2023      📖 **Ph.D., University of Chinese Academy of Sciences (UCAS)**  
Academy of Mathematics and Systems Science (AMSS)  
Major in *Operational Research and Cybernetics*

2014 – 2018      📖 **B.D., Xiangtan University (XTU)**  
School of Mathematics and Computational Science  
Major in *Information and Computing Science (Shaofeng class)*

## Research Publications

### Journal Articles

- 1 J. Yu, J. Leng, Z. Hou, D. Sun, and L.-Y. Wu, "Incorporating network diffusion and peak location information for better single-cell ATAC-seq data analysis," *Briefings in Bioinformatics*, vol. 25, no. 2, bbae093, Mar. 2024, ISSN: 1477-4054. 🌐 DOI: 10.1093/bib/bbae093.
- 2 J. Yu, J. Leng, F. Yuan, D. Sun, and L.-Y. Wu, "Reverse network diffusion to remove indirect noise for better inference of gene regulatory networks," *Bioinformatics*, vol. 40, no. 7, btae435, Jul. 2024, ISSN: 1367-4811. 🌐 DOI: 10.1093/bioinformatics/btae435.
- 3 Z. Hou, J. Leng, J. Yu, Z. Xia, and L.-Y. Wu, "Pathexpsurv: Pathway expansion for explainable survival analysis and disease gene discovery," *BMC Bioinformatics*, vol. 24, p. 434, 2023, ISSN: 1471-2105. 🌐 DOI: 10.1186/s12859-023-05535-2.
- 4 J. Yu, J. Leng, D. Sun, and L.-Y. Wu, "Network refinement: Denoising complex networks for better community detection," *Physica A: Statistical Mechanics and its Applications*, vol. 617, p. 128 681, 2023, ISSN: 0378-4371. 🌐 DOI: 10.1016/j.physa.2023.128681.
- 5 J. Yu and L.-Y. Wu, "Multiple order local information model for link prediction in complex networks," *Physica A: Statistical Mechanics and its Applications*, vol. 600, p. 127 522, 2022, ISSN: 0378-4371. 🌐 DOI: 10.1016/j.physa.2022.127522.

## Skills




Languages      📖 Strong reading, writing and speaking competencies for English, Mandarin Chinese.

Coding      📖 Python, R, Matlab



Misc.      📖 Academic research, teaching, training.

## Projects and Funds

### Projects

- 2020-2021        **Research on analyzing the chain of security incidents**  
13th Five-Year Plan "Comprehensive Risk Assessment Technology for Public Security in the Winter Olympics" project. Participating members.
- 2021-2022        **Research on Performance Evaluation System for Research Institutes**  
Cooperative Project of Beijing Institute of Labour Protection Science. Participating members.
- 2022-2024        **Research on Non-Oil Integrated Supply Chain**  
China National Petroleum Corporation Co-operation Project. Participating members.

### Funds



- 2020-2025        **Graph models and algorithms for cancer regulatory network construction and pathway analysis**  
National Key Research and Development Special Project. Participating members.
- 2024-2027        **Heterogeneous network-based single-cell multi-omics data integration study**  
The Startup Foundation for Introducing Talent of NUIST. Responsible person.

## Miscellaneous Experience

### Awards and Achievements

- 2022        **Schlumberger Scholarships**, University of Chinese Academy of Sciences.
- 2020        **Merit students**, University of Chinese Academy of Sciences.
- 2018        **Xiangtan University 2018 Outstanding Graduates**, Xiangtan University.
-     **Xiangtan Outstanding Graduates**, Xiangtan University.
- 2017        **National Inspiration Scholarship**, Xiangtan University.
- 2016        **Outstanding Student Cadre**, Xiangtan University.
-     **National Scholarships**, Xiangtan University.
-     **Scholarships in Basic Subjects**, Xiangtan University.
-     **Advanced Individual**, Xiangtan University.
-     **Second Prize of Mathematics Competition for College Students in Hunan Province (Mathematics Category)**, Xiangtan University.
-     **Third Prize of the Eighth National University Student Mathematics Competition (Mathematics Major)**, Xiangtan University.
- 2015        **Class A Scholarships**, Xiangtan University.
-     **Xiangjiang Scholarships**, Xiangtan University.

### Certification

- 2018        **National Computer Rank Examination level 2.**
- 2016        **College English Test-6.**